TORONTO, ONTARIO--(Marketwired - July 13, 2017) - [MacDonald Mines Exploration Ltd.] (TSX VENTURE:BMK) ("MacDonald Mines", the "Company", or "BMK") is pleased to announce assay results from recent ground sampling of the newly acquired Reed Booth Vein (*Figure 1*).

Results from Sampling Program:

- Grab sample* containing 13.7 g/t gold collected adjacent to the newly acquired Reed-Booth showing
- Grab samples* containing 4.77 g/t and 6.0 g/t gold collected from float at the main Reed-Booth showing; considered representative of the main style of mineralization at the showing

*Grab samples are selective and may not represent the true mineralization of the prospect.

Quentin Yarie, MacDonald's President and CEO commented*: "Confirmation of the gold-bearing structure associated with the Reed-Booth adds an additional exploration target for the Company. We will continue to prospect the area both for lode gold type targets as well as the extension of the oxide sands which represents MacDonald Mines' goal of being a near term producer."*

About the Reed-Booth Prospect:

Excerpt from *Booth Barry, Joan M REPORT OF A 1993 WORK PROGRAM OFF THE REED BOOTH PROSPECT McMURRAY TOWNSHIP, ONTARIO*

The known gold mineralization on the claim is hosted by quartz veining localized within an altered (chlorite, calcite, sulphide, silica) and sheared intermediate to felsic intrusive rock. A grab sample from the vein system in the main shaft and adit area assayed 0.91 oz/ton, Au Two veins appear to intersect in this area.

Another shaft was located during this program (3 Shaft), 105 metres east- northeast of the main shaft. The vein system at the 3 Shaft is 4.0 feet wide, strikes at 076° and dips -85° towards the north. There is no outcrop in the area between these two shafts.

The 2 Shaft is located approximately 120 metres southeast along the baseline from the main Shaft. There is scattered small quartz veining developed in altered felsic rocks in this area, but no apparent vein in the rock exposed at the shaft collar. Between the Main and 2 Shafts, a 2' to 3' wide quartz has been exposed in an old trench. A grab sample from this vein contained 0. 26 oz/ton, Au. A sample from a vein in this area by earlier workers (Sears, 1986) assayed 0.12 oz/ton, Au.

Grab samples taken by the Ontario Geological Survey in 1981 and 1990 in the waste rock of the vein system also indicated a high gold content in the Vein #1, with individual grab samples containing up to 124.49 g/t gold and 33.86 g/t silver (OFR5798).

About the Holdsworth and Soocana Claims
The project is located near Hawk Junction, ~20 km north east of Wawa, Ontario, and in total, is comprised of 30 claims covering approximately 1142 acres. The Holdsworth claims consist of a contiguous block of 18 fee simple absolute patented claims, including surface and mining rights covering approximately 705 acres. The Soocana claims consist of a contiguous block of 12 claims that cover 437.3 acres. These claims are under a 99-year lease agreement with Josephine Forest Resources Ltd. that expires on July 31, 2039.

Figure 1: http://media3.marketwire.com/docs/BMK713.jpg

Wawa-Holdsworth Project Highlights

- Neighboring Richmont's Island Gold Mine, Argonaut's Magino Gold Project and Goldcorp's Borden project
- Numerous gold showings with diversified mineralization styles occurring in a 500 metres-wide deformation corridor
- Year-long road access and easy access to rail, road, electrical power, labour force and suppliers

Overview of the Wawa-Holdsworth Project

Historic work by previous operators defined three gold targets on the Wawa-Holdsworth Project:

- Greenstone-hosted quartz-carbonate vein deposit (Soocana Vein System and Reed-Booth Showing);
- BIF-hosted gold deposits (gold-bearing pyrite zones in an Algoma-type iron formation);
- Gold-bearing Oxide Sands developed from the weathering of the auriferous Pyrite Zones.

MacDonald Mines is focusing its near-term exploration program on the Oxide Sands. These appear to extend for more than 2 kilometres on the property as corroborated by MacDonald's recent airborne magnetics results (*see* June 1, 2017 News Release) and reach a depth of at least 8 metres.

Recent preliminary sampling of the Oxide Sands by MacDonald Mines returned an average grade of 5.45 g/t gold (see May 16, 2017 News Release). Positive preliminary metturligal results (see July 11, 2017);

- The concentration ratio of gold in rougher flotation averaged 6.0:1
- The concentration ratio of silver in rougher flotation averaged 5.2:1
- Reduction of feed volume in rougher flotation by approximately 85-90%
- The Oxide Sands can be processed by a simple crushing/flotation process
- No caustic treatments are necessary
- The processing will require low power requirements
- The waste material is inert (>70 percent silica/quartz)

The soft and relatively unconsolidated Oxide Sands material can be extracted like an aggregate. The Company is working to better define the Oxide Sands as continues to prepare for their potential extraction.

Qualified Person
Quentin Yarie, P Geo. is the qualified person responsible for preparing, supervising and approving the scientific and technical content of this news release.

About MacDonald Mines Exploration Ltd.
MacDonald Mines Exploration Ltd. is a mineral exploration company headquartered in Toronto, Ontario focused on gold and silica exploration in Canada. The Company has built a portfolio of safe-jurisdiction, infrastructure-rich projects that demonstrate the greatest market potential for return. The Company is aggressively advancing its highly prospective Wawa-Holdsworth Project.

The Company's common shares trade on the TSX Venture Exchange under the symbol "BMK".

To learn more about MacDonald Mines, please visit www.macdonaldmines.com

Cautionary Statement:

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